

OCEAN ICE.

The positions of icebergs reported for the current month are shown on Chart I by crosses. On the 2d ice was observed in N. 45° 34', W. 50° 35'. On the 11th, in N. 47° 40', W. 49° 58', a large berg was noted. On the 13th heavy ice was encountered near St. Johns, N. F. On the 23d, a berg 100 feet high and 300 feet long, was reported in N. 48° 16', W. 50° 39'.

From January, 1882 to 1888, inclusive, arctic ice in small quantities was reported east of Newfoundland, but in no case was it sighted south of the forty-third parallel. In 1889 and

1892 no ice was reported. In 1890 vast fields of ice and enormous icebergs were encountered over and near the Grand Banks, north of the forty-third parallel. In 1891, on the 28th, 3 large icebergs were observed in N. 46° 30', W. 52° 46', and on the 31st patches of soft ice were encountered in N. 45° 50', W. 59° 20'. In 1893, on the 5th, a large berg was noted in N. 47° 35', W. 48° 34'; on the 8th, a long, low berg was observed in N. 48° 10', W. 47° 26'; on the 18th, a berg was noted in N. 48° W. 46°. In 1894 more ice was reported during January than in any corresponding month for the past 12 years.

TEMPERATURE OF THE AIR.

[In degrees Fahrenheit.]

The distribution of the monthly mean temperature of the air over the United States and Canada is shown by the dotted isotherms on Chart II; the lines are drawn over the high irregular surface of the Rocky Mountain plateau, although the temperatures have not been reduced to sea level, and the isotherms, therefore, relate to the average surface of the country occupied by our observers; such isotherms are controlled largely by the local topography, and should be drawn and studied in connection with a contour map.

DIURNAL PERIODICITY.

The regular diurnal period in temperature is shown by the hourly means given in Table IV for all stations having self-registers.

NORMAL TEMPERATURE.

In Table II, for voluntary observers, the mean temperature is given for each station, but in Table I, for the regular stations of the Weather Bureau, both the mean temperatures

and the departures from the normal are given for the current month. In the latter table the stations are grouped by geographical districts, for each of which is given the average temperature and departure from the normal; the normal for any district or station may be found by adding the departures to the current average when the latter is below the normal and by subtracting when it is above.

The years of highest and lowest mean temperature for January may be had from Table I of the January, 1894, Review. In this Review the absolute January maximum and minimum temperature for each Weather Bureau station during the entire period of observation is given on the right margin of Table I. It is proposed to give these data for each month in the successive issues of the Review.

Some of the details heretofore published under this section have been omitted to make room for other articles, but the numerical tables contain the information usually given, and its repetition in this text is believed to be unnecessary.

PRECIPITATION.

[In inches and hundredths.]

The distribution of precipitation for the month of January, 1895, as determined by reports from about 2,000 stations, is exhibited on Chart III. The numerical details are given in Tables I, II, and III; the first of these also gives the average departures from the normal for each district. Unless otherwise stated, the snow or hail is understood to be melted and added to the rainfall.

DIURNAL VARIATION.

Table XII gives the total precipitation for each hour of seventy-fifth meridian time, as deduced from self-registering gauges kept at about 43 regular stations of the Weather Bureau; of these 37 are float gauges and 7 are weighing gauges.

NORMAL PRECIPITATION FOR JANUARY.

The normal precipitation for January is shown on Chart I of the Atlas of Bulletin C, entitled "Rainfall and Snow of the United States, Compiled to the End of 1891, with Annual, Seasonal, Monthly, and other Charts," by Mark W. Harrington, Chief of the Weather Bureau, Washington, 1894. From this chart it appears that the region of greatest rainfall in January is on the north Pacific coast and in the Lower Mississippi Valley, including Tennessee and the mountainous portions of Georgia and North Carolina.

PRECIPITATION FOR CURRENT MONTH.

The precipitation for the current January was heaviest in the extreme northwest corner of Washington and along the Pacific coast as far south as San Francisco. The maxima were: East Clallam, 15.44; Tatoosh Island, 12.50; Neah Bay,

12.44; Pysht 12.07; Fort Canby, 11.52, also at Halifax, 10.12. Other details may be drawn from the charts and tables.

HAIL.

The following are the dates on which hail fell in the respective States:

Alabama, 16. Arizona, 24. Arkansas, 6, 20. California, 15 to 18. Florida, 9, 16. Illinois, 21. Indian Territory, 19. Iowa, 20, 21. Kentucky, 7. Louisiana, 1, 25. Maryland, 12. Michigan, 21. Mississippi, 15, 16. Missouri, 15, 20, 21. Oregon, 11, 13, 17, 21. South Carolina, 2. Tennessee, 7. Texas, 24, 25. Virginia, 12. Washington, 13.

SLEET.

The following are the dates on which sleet fell in the respective States:

Alabama, 2, 8, 9, 10, 28. Arizona, 17. Arkansas, 1, 2, 4, 8, 15, 24, 25, 27, 30. California, 3, 8, 16, 18, 19, 20, 23. Connecticut, 6, 8, 10, 11, 16, 26. Delaware, 8, 15, 25. District of Columbia, 9, 25, 26. Georgia, 2, 3, 28, 29. Idaho, 1, 4, 11, 13, 16. Illinois, 5, 6, 9, 11, 16, 20, 25. Indiana, 5, 6, 10, 25, 26. Indian Territory, 1, 2, 24. Iowa, 4, 5, 6, 18, 21. Kansas, 3, 4, 5, 14, 15, 20, 21, 25, 31. Kentucky, 9, 10, 25, 26. Louisiana, 27 to 30. Maine, 6, 7, 10, 11, 13. Maryland, 5, 6, 8, 9, 10, 12, 16, 18, 24, 25, 26, 28. Massachusetts, 6, 9, 10, 11, 18, 22, 26. Michigan, 5, 7, 18, 20, 21. Minnesota, 5, 17, 18, 20, 21. Mississippi, 1, 3, 8, 9, 14, 27 to 30. Missouri, 3 to 7, 10, 14, 15, 20, 24, 25, 27, 29. Nebraska, 5, 13, 14, 17, 18, 19, 21, 22, 30. Nevada, 4, 5, 6, 12, 13, 16 to 19, 22. New Hampshire, 6, 7, 10, 11, 13, 26. New Jersey, 5 to 10, 13, 15, 16, 18, 19, 21, 22, 25, 26.

New York, 5, 6, 8, 10, 11, 13, 18, 25, 26. North Carolina, 3, 9, 10, 12, 17, 25, 26, 28, 29, 30. North Dakota, 13, 14, 18, 19, 20. Ohio, 5, 6, 8, 9, 10, 16, 18, 23 to 26. Oklahoma, 1, 4. Oregon, 4, 9, 17. Pennsylvania, 5, 6, 8, 9, 10, 16, 18, 25, 26. Rhode Island, 10, 16. South Carolina, 2, 12, 16, 28, 30. South Da-

kota, 4, 15, 19, 20, 28. Tennessee, 8, 9, 10, 14, 15, 28. Texas, 1, 26 to 29. Utah, 5, 16, 19, 23. Vermont, 10 to 13, 22. Virginia, 5, 8, 9, 10, 12, 14, 17, 19, 25, 26, 28. Washington, 2 to 5, 8, 13, 14, 17. West Virginia, 4, 6, 9, 10, 19, 25, 26, 29. Wisconsin, 18, 20, 21.

WIND.

PREVAILING DIRECTIONS.

The prevailing winds for January, 1895, viz, those that were recorded most frequently at Weather Bureau stations, are shown in Tables I and IX; they are not given on Chart II, as has hitherto been the custom, but the resultant winds are published instead.

HIGH WINDS.

Maximum wind velocities of 50 miles, or more, per hour were reported at regular stations of the Weather Bureau as follows (maximum velocities are averages for five minutes; extreme velocities are gusts of shorter duration, and are not given in this table):

Stations.	Date.	Velocity.	Direction.	Stations.	Date.	Velocity.	Direction.
		<i>Miles</i>				<i>Miles</i>	
Amarillo, Tex.....	5	50	sw.	Fort Canby, Wash.....	20	52	e.
Do	20	76	w.	Grand Haven, Mich.....	21	50	sw.
Block Island, R. I.	10	58	ne.	Hannibal, Mo.....	21	50	w.
Do	26	56	se.	Idaho Falls, Idaho	16	52	s.
Buffalo, N. Y	26	64	w.	Kittyhawk, N. C.....	25	52	se.
Do	27	59	w.	Do	26	56	se.
Calro, Ill	25	52	sw.	Do	28	50	n.
Chicago, Ill	21	64	sw.	Lexington, Ky.....	26	60	sw.
Do	25	60	np.	Milwaukee, Wis.....	21	50	sw.
Cleveland, Ohio	13	54	sw.	Port Huron, Mich.....	21	53	sw.
Davenport, Iowa	21	54	sw.	Pueblo, Colo.....	17	50	sw.
Eastport, Me.....	26	66	se.	St. Louis, Mo.....	21	56	sw.
Fort Canby, Wash.....	2	58	e.	Tatoosh Island, Wash.....	2	66	e.
Do	3	56	e.	Do	8	73	e.
Do	4	53	e.	Do	12	54	s.
Do	9	52	s.	Do	13	50	w.
Do	10	52	se.	Do	15	52	e.
Do	11	53	se.	Do	16	50	e.
Do	12	77	se.	Winnemucca, Nev.....	4	60	s.
Do	13	54	se.	Woods Holl, Mass.....	18	50	sw.
Do	15	50	e.	Do	26	54	sw.
Do	16	58	e.				

LOCAL STORMS.

Destructive or severe local storms were reported as follows:

- 3d.**—Seattle, Wash., snowstorm.
5th.—Salt Lake City, Utah, windstorm.
6th.—Little Rock, Ark., thunderstorm.
7th.—Nunnally, Tenn., and Greendale, Ky., thunderstorms.
8th.—Kershaw, S. C., thunderstorm.
13th.—Near Fulton, Mo., windstorm.
16th.—Mobile, Ala., thunderstorm; several persons injured.
17th.—Oakland, Cal., windstorm.
18th.—Northwestern part of Daviess County, Mo., windstorm.
19th.—Los Angeles, Cal., rainstorm.
20th.—Kiowa, Kans., windstorm.
21st.—New Iberia, La., windstorm; 1 person injured. Eg-lantine and near Pocahontas, Ark., windstorms. Winslow, Ark., thunderstorm. Near Greenway, Ark., thunderstorm; 13 persons injured. Covington, Tenn., and Unionville, Mo., thunderstorms. Nelson, Mo., and Benton Harbor and Muskegon, Mich., windstorms.
24th.—Livingston, Tex., windstorm.
25th.—Crowley, La., windstorm; 1 person killed. Western part of Vermilion County, La., windstorm; 2 persons killed. Rayne, La., windstorm. Kountze, Tex., windstorm; 2 persons injured. Near Beaumont, Texas City, Olive, and Dodge, Tex., and Olney, Ill., windstorms.
28th.—Magnolia, Miss., windstorm; several persons injured. Alvin, Tex., windstorm. Galveston, Lamarque, Webster, and Clear Creek, Tex., thunderstorms. Dickinson, Tex., thunderstorm; 4 persons injured.

ATMOSPHERIC ELECTRICITY.

GENERAL STATISTICS.

The statistics relative to auroras and thunderstorms for this month are given in detail in Table XI, which shows the number of stations from which meteorologic reports were received, and the number of such stations reporting thunderstorms (T) and auroras (A) in each State and on each day of the month.

THUNDERSTORMS.

A mention of the more severe thunderstorms reported during the month is made under "Local storms." The dates on which reports of thunderstorms were most numerous were: 6th, 7th, 16th, 20th, 21st.

The States where thunderstorm reports were most numerous were: Louisiana, Ohio, Missouri, Illinois, Mississippi, Florida, Iowa, and North Carolina.

The States where the dates of thunderstorms were most frequent were: Louisiana, where they were recorded on 15 days; Florida, on 14 days; Ohio, on 9 days; Mississippi, on 8 days; North Carolina and Arkansas, on 7 days.

AURORAS.

The evenings on which bright moonlight must have inter-

ferred with observations of faint auroras are assumed to be the four days preceding and following the date of full moon, viz, from the 6th to the 14th, inclusive. On the remaining twenty-two days of this month 122 reports were received, or an average of 6 per day. The dates on which the reported number especially exceeded this average were: 1st, 18; 16th, 15; 19th, 16.

The States from which auroras were reported by a large percentage of observers were: Vermont, North Dakota, New Hampshire, and Minnesota.

The States where the dates of auroras were most numerous were: Wisconsin, 11; Minnesota, 10; Colorado, 8; Nevada, North Dakota, and Vermont, 5.

CANADIAN DATA—THUNDERSTORMS AND AURORAS.

Auroras were reported as follows: 1st, Kingston, Ont.; 2d, Medicine Hat, Assin., and Prince Albert, Sask.; 15th, Medicine Hat, Assin.; 17th, Father Point and Quebec, Que.; White River, Ont., and Minnedosa, Man.; 18th, Father Point, Que., and Qu'Appelle, Assin.; 19th, St. Andrews, N. B., Quebec, Que., Kingston, Ont., Minnedosa, Man., and Medicine Hat, Assin.; 20th, Father Point, Que., and Medicine Hat,